

Weather Briefing, 20050123, noon EST, Pease Int'l Tradeport

“...Why do you come so soon, you used to come at 10 o'clock, and now you come at noon.” A bit late today, I admit, but I am still the only one in the Pease met room at this time.

[http://bocachica.arc.nasa.gov/PAVE/rh\\_omega/TR\\_peasetp\\_35kft\\_day118.pdf](http://bocachica.arc.nasa.gov/PAVE/rh_omega/TR_peasetp_35kft_day118.pdf) The worst of the snow has stopped, but winds are strong (25 mph) and it is only 7F. The storm has been somewhat slower than expected, and upwards of two feet have fallen, instead of the “6 inches plus” I indicated yesterday. Nevertheless, as forecast, the worst of it is south of us. The snow will end this afternoon, with clearing tonight. Tomorrow will start out partly sunny, clouding in the afternoon with some snow (they call it flurries here). Winds from the northwest 15-25 mph and highs in the 20s. The warming trend through the week will not be as pronounced as yesterday, with highs in the low 20s all week – not much warming until Saturday (and then only near 30). Winds should be less later in the week – about 10 knots by Wednesday. There is a good chance of snow by Wednesday (40 %), though not enough to affect aircraft ops. Surface weather on Thursday looks similar to Wednesday.

At Dryden, no significant weather is forecast for Monday's flight.

Flight level conditions:

Clouds at altitude are consistent with my previous forecasts, That is, no clouds northeast of a line from well west of the extreme west edge of Hudson's bay, through the Great Lakes, to Cape Hatteras.(

[http://bocachica.arc.nasa.gov/PAVE/rh\\_omega/TR\\_peasetp\\_35kft\\_day118.pdf](http://bocachica.arc.nasa.gov/PAVE/rh_omega/TR_peasetp_35kft_day118.pdf) ) Expect to encounter clouds as the jet stream is crossed. Winds will be over 130 knots at 35kft in the core of the jet stream.

On Wednesday, we still have a deep trough just off the coast, tilting slightly northwestward with latitude. Greenland eastward has high tropopauses and high clouds, with tropopauses generally below 33kft westward

[http://bocachica.arc.nasa.gov/PAVE/rh\\_omega/TR\\_peasetp\\_35kft\\_day312.pdf](http://bocachica.arc.nasa.gov/PAVE/rh_omega/TR_peasetp_35kft_day312.pdf) The two domains are separated by a powerful northward jet, with winds projected up to 150 knots at 35 kft in west central Greenland

[http://bocachica.arc.nasa.gov/PAVE/rh\\_omega/T\\_peasetp\\_35kft\\_day312.pdf](http://bocachica.arc.nasa.gov/PAVE/rh_omega/T_peasetp_35kft_day312.pdf) An interesting windup structure can be seen over Ellesmere island, probably evidence of upward transfer of tropospheric air into the middleworld. This is directly related to the downstream development of the current storm, with the surface low moving northwestward after it has gone out to sea. Because of all the storm activity, substantial moisture has been advected northward at low to mid levels, and clear regions will be few and far between, at least over the ocean. A guide to possible clear regions can be seen in the Relative Humidity plot

[http://bocachica.arc.nasa.gov/PAVE/rh\\_omega/RH\\_peasetp\\_850mb\\_day312.pdf](http://bocachica.arc.nasa.gov/PAVE/rh_omega/RH_peasetp_850mb_day312.pdf).

Other than a dry tongue upstream of the minor weather system that passes through our area on Monday (and has grown substantially by Wednesday out in the Atlantic), and a narrow outflow region over our area, things are pretty wet. Notably, Thursday does not look much better.

In the stratosphere, the vortex lobe on our side of the planet appears quite persistent, maintaining a similar position to Monday's situation into Wednesday and Thursday ([http://bocachica.arc.nasa.gov/PAVE/asm\\_rh\\_omega/TH\\_peasetp\\_450K\\_day312.pdf](http://bocachica.arc.nasa.gov/PAVE/asm_rh_omega/TH_peasetp_450K_day312.pdf)).